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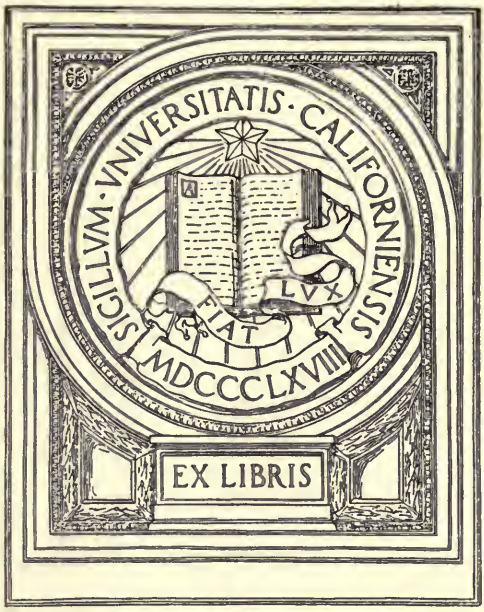

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MINING CODE

OF THE

State of Arizona

ISSUED BY

TOM C. FOSTER, State Inspector of Mines

PHOENIX, ARIZONA

THE MANUFACTURING STATIONERS INC., PHOENIX, ARIZONA

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CHAPTER 51.
Mines and mining.

rticle:

1. Mining location.
2. Mine inspector and operation of mines.

Article 1. Mining location.

2266. Location upon discovery of mineral place. On the discovery of mineral in place i the public domain of the United States the me may be located as a mining claim by the scoverer for himself, or for himself and oth-s, or for others. (§ 3231, R. S. '01; 4027, . S. '13.)

§ 2267. Location notice, contents; amendent. Such location shall be made by erecting ; or contiguous to the point of discovery a onspicuous monument of stones, not less than ıree feet in height, or an upright post, se-ırely fixed, projecting at least four feet ove the ground, in or on which there shall e posted a location notice, signed by the name the locator. The location notice must con-ain: The name of the claim located; the name f the locator; the date of the location; the ngth and width of the claim in feet, and the istance in feet from the point of discovery to ach end of the claim; the general course of ie claim; the locality of the claim with refer-nce to some natural object or permanent ionument whereby the claim can be identi-ied; and until each of the same shall have een done no right to such location shall be cquired. The notices may be amended at any ime and the monuments changed to corres-ond with the amended location; provided, hat no change shall be made which will inter-ere with the rights of others. (§ § 3232-3, 238, R. S. '01; 4028-9, 4034, R. S. '13, Cons. ; rev.)

§ 2268. Completing location; additional cts; failure. From the time of the location he locator shall be allowed ninety days with-n which to do the following: Cause to be ecorded in the office of the county recorder a opy of the location notice; sink a discovery haft in the claim to a depth of at least eight eet from the lowest part of the rim of the haft at the surface, and deeper, if necessary, ntil there is disclosed in said shaft mineral n place; and monument the claim on the ;round so that its boundaries can be readily raced. Failure to do all such things in the ime and place specified shall be an abandon-nent of the claim, and all right and claim hereto of the discoverer and locator shall be orfeited. (§ § 3234-5, R. S. '01; 1, 3, Ch. 60, L. '09; 4030-1, R. S. '13, cons. & rev.)

§ 2269. Monumenting. Such boundaries shall be monumented by six substantial posts projecting at least four feet above the surface of the ground, or by substantial stone monuments at least three feet high, one at each corner of the said claim and one at the center of each end line thereof; when, however, the point of a monument is at the same point and coincides with a monument of the survey of the United States, the monument of such government survey, shall be deemed a mining claim monument. (§ 3236, R. S. '01; 4032, R. S. '13, am., Ch. 125, L. '19, rev.)

§ 2270. Tunnel as location work. Any open cut, adit or tunnel, made as a part of the location of a lode mining claim, equal in amount of work to a shaft eight feet deep and four feet wide by six feet long, and which shall cut a lode or mineral in place at a depth of ten feet from the surface, shall be equivalent, as discovery work, to a shaft sunk from the surface. (§ 2, Ch. 60, L. '09; 4033, R. S. '13, rev.)

§ 2271. Relocation. The location of an abandoned or forfeited claim shall be made in the same manner as other locations, except that the relocator may perform his location work by sinking the original location shaft eight feet deeper than it was originally, or if the original location work consisted of a tunnel or open cut, he may perform his location work by extending said tunnel or open cut by removing therefrom two hundred and forty cubic feet of rock or vein material. (§ 1, Ch. 22, L. '07; 4037, R. S. '13, in part, rev.)

§ 2272. Locating and monumenting placer claims; recording notice. The locator of a placer mining claim shall locate his claim in the following manner: By posting a location notice thereon containing the name of the claim, the name of the locator, the date of location and the number of acres claimed; a description of the claim with reference to some natural object or permanent monument that will identify the claim and by marking the boundaries of his claim with a post or monument of stones at each angle of the claim located. When a post is used it must be at least four inches in diameter by four feet six inches in length, set one foot in the ground and surrounded by a mound of stone or earth. Where it is practically impossible on account of a bed of rock or precipitous ground to sink such posts, they may be placed in a pile of stones. If it is impossible to erect and maintain a post or monument of stone at any angle of such claim, a witness post or monument

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may be used, to be placed as near the true corner as the nature of the ground will permit. When a mound of stone is used, it must be at least three feet in height and four feet in diameter at the base. The locator shall, within sixty days after the date of location, record a copy of the location notice. (§ § 3242-3-4, R. S. '01; 4038-9-40, R. S. '13, cons. & rev.)

§ 2273. Affidavit of performance of annual work; prima facie evidence. Within three months after the expiration of the time fixed for the performance of annual labor or the making of improvements upon a mining claim, the person on whose behalf such work or improvement was made, or some person for him knowing the facts, may make and record an affidavit, in substance as follows:

State of Arizona, county of .....ss: ....., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, resides at ....., in ..... county, Arizona, is personally acquainted with the mining claim known as ..... mining claim, situated in ..... mining district, Arizona, the location notice of which is recorded in the office of the county recorder of said county, in book ..... of records of mines, at page ..... That between the ..... day of ....., A. D. ....., and the ..... day of ....., A. D. ....., at least ..... dollars worth of work and improvements were done and performed upon said claim, not including the location work of said claim. Such work and improvements were made by and at the expense of ....., owners of said claim, for the purpose of complying with the laws of the United States pertaining to assessment or annual work, and (here name the miners or men who worked upon the claim in doing the work) were the men employed by said owner and who labored upon said claim, did said work and improvements, the same being as follows, to-wit: (Here describe the work done, and add signature and verification.)

Such affidavit when recorded, shall be prima facie evidence of the performance of such labor or improvements. (§ 3240, R. S. '01; 4035, 4037, in part, R. S. '13, rev.)

§ 2274. One affidavit for group. When two or more contiguous claims are owned by the same person, and constitute a group, and the annual work is done upon each of said claims or upon one or more of the same for the benefit of all, or wholly or partly outside of such claims for the benefit of all, all such claims may be included in a single affidavit. (§ 4036, R. S. '13.)

§ 2275. Advertising delinquent co-owners; effect as evidence. Whenever a co-owner shall give to a delinquent co-owner the notice in writing or notice by publication to contribute his proportion of the expense of annual labor as provided by the laws of the United States, an affidavit of the person giving such notice, stating the time, place, manner of service, and by whom and upon whom such service was made, shall be attached to a true copy of such notice, and such notice and affidavit recorded. Ninety days after giving the notice; or, if such notice is given by publication in a newspaper, there shall be attached to a printed copy of such notice an affidavit of the editor or publisher of such paper, stating the date of each insertion of such notice therein, and when and where the newspaper was published during that time, and such affidavit and notice shall be recorded one hundred and eighty days after the first publication. The original of such notice and affidavits, or the records thereof, shall be prima facie evidence that the said delinquent has failed or refused to contribute his proportion of the expenditure, and of the service or publication of said notice; unless the writing or affidavit provided for in the following section is of record. (§ § 3245, mod., 3246, R. S. '01; 4042-3, R. S. '13, cons. & rev.)

§ 2276. Contribution by delinquent co-owner; acknowledgment. If such delinquent shall, within the time required by the laws of the United States, contribute his proportion of such expenditures, such co-owner shall sign and deliver to the delinquent, a writing stating that the delinquent by name, has, within the time required contributed his share for the year upon the claim, and further stating therein the district, county and state wherein the claim is situate, and the book and page where the location notice is recorded. Such writing shall be recorded. If such co-owner fail to sign and deliver such writing to the delinquent within twenty days after such contribution, he shall be liable to the delinquent for a penalty of one hundred dollars, and the delinquent, with two disinterested persons having personal knowledge of said contribution, may make an affidavit, setting forth the manner, amount, to whom and upon what mine such contribution was made. Such affidavit may be recorded, and shall be prima facie evidence of such contribution. (§ § 3247-8, R. S. '01; 4044-5, R. S. '13, cons. & rev.)

§ 2277. Sufficiency of description of mining claims. In all actions, judgments, grants or conveyances it shall be a sufficient description of a mining claim if the name of the

ıim, the district, county and state where it is ıuate, and the book and page where the loca- ɔn notice thereof is recorded can be intelli- ntly learned therefrom. (§ 3249, R. S. '01; 46, R. S. '13, rev.)

rticle 2. Mine inspector and operation of mines.

§ 2278. Qualifications of mine inspector; ıties; deputies; salary. The state mine in- ector shall have been a resident of this state least two years prior to his election, not ıder thirty years of age, and shall have been ·actically engaged in, and acquainted with. ines and mining in this state, and shall have least seven years' experience in under- ·ound mining. No person may be an inspec- r or deputy inspector while an employee, rector, or officer, of any mining, milling, or ıelting company. The inspector, and each ·puty, shall devote his entire time to the du- es of his office. The inspector shall receive, addition to his salary, his necessary travel- g expenses when traveling in the discharge official duties. He shall give bond to the ate in the sum of five thousand dollars. § § 3, 5, Ch. 33, L. '12; 4055, 4057, R. S. '13, ɔns. & rev.)

§ 2279. Deputy inspectors; qualifications; ɔmpensation; seal. The state mine inspector ıall appoint three deputies having the same ualifications as the mine inspector. They ıall receive a salary of twenty-four hundred ollars per annum, each, and their necessary ·aveling expenses and give bond to the state ı the sum of twenty-five hundred dollars. he mine inspector shall have a seal bearing ıe words: "Mine Inspector, State of Ari- ɔna," which shall be affixed to official docu- ıents. (§ § 6-7, 9, Ch. 33, L. '12; 4059, am., h. 54, L. '19; 4058-9, 4061, R. S. '13, cons. rev.)

§ 2280. Reports to be kept secret, dismissal or violation. No inspector, deputy or em- loyee shall make a report on any mine or ıining property or prospect, except an of- icial report to his superior officer, or to the overnor; nor shall he make public or reveal ɔ any other person knowledge or information btained by him in the exercise of his official uties concerning ore, ore bodies, or values, of ny mine or part thereof. An inspector or eputy violating this section shall be dismissed rom office. (§ 8, Ch. 33, L. '12; 4060, R. S. 13, rev.)

§ 2281. Inspection of mines; powers of in- pector. The mine inspector shall visit, at east once every three months, every mine in his state employing fifty or more men under- ·round, and every other working mine em- ploying six or more men, at least once every year, and shall inspect and examine into the operation, conditions, safety appliances, ma- chinery, sanitation and ventilation therein, the means of ingress and egress, and the means taken to protect the lives, health and the safe- ty of the miners, the cause of accidents and deaths therein, and inspect and ascertain the means taken to comply with this chapter. The inspector may at all hours enter and examine any part of any mine, visit, investigate, and exami·e any plant or equipment connected therewith, or any part of the workings there- of. All operators and their employees shall assist the inspector to make such examination. (§ 10, Ch. 33, L. '12; 4062, R. S. '13, rev.)

§ 2282. Notification to inspector of begin- ning or suspension of operations; penalty for failure. Whenever mining operations are ini- tiated in any mine or mining property coming under the jurisdiction of the inspector, and such mining property not theretofore being in continuous operation, employing six or more employees; or, whenever the operations there- in are suspended, the operator of such mine or mining property within ten days after the initiation, commencement or suspension of such operations, shall notify the inspector in writing, at his office of such initiation or sus- pension of work. An operator violating this section shall be guilty of a misdemeanor and fined not less than fifty nor more than three hundred dollars. (Ch. 73, L. '21, rev.)

§ 2283. Notice of dangerous condition; op- erators to comply with requirements; mine to be closed upon failure. If upon inspection it shall appear to the mine inspector that a mine is, from any cause, in a dangerous condition or fails to comply with the requirements of law, he shall at once serve written notice on the operator or his agent in charge, stating in detail why said mine is dangerous, insecure, or not in compliance with the law, and what necessary changes should be made, and specify a reasonable time within which to make the same. The operator shall forthwith make such change and comply with said notice. In any action against a party so notified, for loss of life or bodily injuries sustained by an em- ployee subsequent to such notice and in conse- quence of said dangerous condition, a certified copy of the notice served by the inspector shall be prima facie evidence of the negli- gence of said party.

If it appears from a re-examination that such changes or compliances have not been made within the time specified in such notice, and that the mine is still in a condition dan- gerous to life or health, and in the opinion of the inspector it is necessary for the safety of

the life or health of the employees that the same be vacated, the inspector shall forthwith order the cessation of the operation and working of said mine or part thereof, and order that the employees shall not be permitted therein except to remedy the defects complained of, until this chapter is complied with to the satisfaction of the inspector. The operator of said mine shall forthwith obey said order. (§ 11, Ch. 33, L. '12; 4063, R. S. '13, rev.)

§ 2284. Complaint of dangerous condition; inspection. Whenever the inspector receives a complaint in writing signed by a person employed in a mine, setting forth that the mine or part thereof in which he is working is being operated contrary to law, or is dangerous in any respect to the health or lives of those employed therein, and when such danger was first observed, the inspector shall examine such mine as soon as possible. The name of the person making such complaint shall not be disclosed by the inspector, unless permission be expressly granted by such person. The complaint shall be indexed and filed by the inspector. (§ 12, Ch. 33, L. '12; 4064, R. S. '13, rev.)

§ 2285. Accidents to be reported to inspector; investigation. Whenever loss of life or serious accident shall occur in any mine the operator shall give immediate notice thereof, and report the facts in writing to the mine inspector. The refusal or failure to so report shall be a misdemeanor. The inspector, upon receipt of notice of such accident, shall investigate the same and make a report to be filed in his office. In case of loss of life the inspector shall appear at the coroner's inquest held respecting such accident, and may examine the witnesses. If the inspector considers the facts warrant it he shall cause a copy of the report, or a copy of the testimony, together with the verdict of the coroner's jury, and all papers in his hands relating thereto, to be forwarded to the attorney for the county in which the accident or loss of life occurred, together with an accompanying statement of the inspector, showing in what particular he believes the law to have been violated. (§ 13, Ch. 33, L. '12; 4065, R. S. '13, rev.)

§ 2286. Record of inspections. After every inspection the inspector shall enter forthwith in a book to be kept at the mine and designated as the "Record of Inspection", the portion of the mine so inspected, the nature of such inspection, and every dangerous defect observed in the state and conditions of the mine, machinery, and appliances; but nothing contained in or omitted from such entry shall limit or affect the duty and obligation of the owner or operator of such mine under this chapter. Such record shall be open at all reasonable times to the examination of the inspector and of any miner. (§ 15, Ch. 33, L. '12; 4067, R. S. '13, rev.)

§ 2287. Annual report to governor by inspector. The mine inspector on the thirty-first day of December in each year shall make and file with the governor a report giving a statistical summary and report of the work during the year ending November thirtieth. Such report shall contain a statement showing the number of men employed in each mine in the state, and separately, the number of men employed above ground and under ground, the number and nature of fatal and serious accidents occurring in each mine, the number of inspections made, complaints filed, inquests attended, mines or mine workings ordered to be vacated, violations found, and other information deemed important, together with necessary or desirable recommendations. Copies of such reports shall be published and distributed at the expense of the state. (§ 16, Ch. 33, L. '12; 4068, R. S. '13, rev.)

§ 2288. First aid appliances and corps. The operator or person in charge of a mine, where ten or more men are employed, shall keep at the mouth of the tunnel, shaft, or stope, or at such other place about the mine as may be designated by the mine inspector, a stretcher and a woolen water-proof blanket, in good condition, for use in carrying any person who may be injured at the mine; where more than one hundred persons are employed, two or more of same shall be kept. At all mines a supply of first aid remedies shall be kept readily accessible. In mines where three hundred or more men are employed, a first aid corps must be organized, consisting of the foreman, shift bosses, timekeepers, and other employees, designated by the operator or superintendent, and the services of a competent surgeon and physician shall be procured to instruct the members not less than once in each calendar month, in the proper handling and treatment of injured persons before the arrival of a physician. (§ 17, Ch. 33, L. '12; 4069, R. S. '13, rev.)

§ 2289. Maps of under ground workings When ordered by the mine inspector, the operator of every mine, employing ten or more men under ground, shall make and maintain a reasonably accurate map of the workings of such mine. At least once in every six months, or oftener, if necessary, the operator shall make alterations on, or additions to, the map showing all excavations made since last shown

on said map. All parts of said mine, which were worked or abandoned shall be clearly indicated, and all under ground workings shall be surveyed and mapped before they are allowed to become inaccessible. Such maps shall, at all times, be open to the examination of the mine inspector. (§ 18, Ch. 33, L. '12; 4070, R. S. '13, rev.)

§ 2290. Explosives, care, record and use of. Explosives must be stored in a magazine used for that purpose only, to be placed far enough from the working shaft, tunnel, or incline to insure their remaining intact if the entire stock explode. Explosives shall not be stored in underground workings where men are employed; explosives in excess of the amount required for twenty-four hours' work shall be kept in the magazine and such temporary supply shall not be kept at any place where its accidental discharge would cut off the escape of miners. The operator shall provide a suitable device for thawing or warming powder and keeping the same in condition for use, and no powder shall be thawed except in such device; oils or other combustible substances or blasting caps shall not be kept or stored in the same magazine with explosives. All nitroglycerine, nitro or blasting powder, or other high explosives sold in the state shall be properly marked with the date of manufacture on each stick of powder, and no nitro-glycerine, nitro or blasting powder, or other high explosives shall be sold or used after twelve months from the date of manufacture. The mine inspector may regulate and limit the amount of blasting or nitro powder or other high explosives stored or kept in general supply stores in mining camps or mining towns where there is no law governing the storage of same.

No person shall, whether working for himself or in the employ of another, while loading or charging a hole with any blasting powder or other high explosives, use or employ any steel or iron tamping bar; nor shall any person allow or permit the use of such steel, iron, or other metal tamping bar while loading or charging a hole by employees under his management or direction.

Every person manufacturing, storing, selling, transferring, or in any manner disposing of any powder or other high explosives, shall keep in a book for that purpose an accurate record of all transactions, with the date thereof, relating to the receiving and disposing of the same, showing the amount of each such explosive received, of whom received, when received, disposition made of such explosive, with the amount thereof, and the name of the person to whom delivery was made, who shall be required to receipt therefor. Such record shall at all times be open to the inspection of the mine inspector, or any peace officer.

Before firing charges, warning must be given in every direction from which access may be had to the place where blasting is going on, and mis-fire holes shall be reported to the mine foreman, or the shift boss, in charge at the locality of such holes. If the shots are fired by electricity, the place must be carefully examined before men are permitted to work therein. The person in charge shall further instruct those employed in clearing away the loose rock, to report to him immediately the finding of any wires in or under the loose rock, and if discovered, he shall at once order the work to cease until the wires have been carefully traced to their terminals in order to determine whether a mis-fire has occurred. (§ 19, Ch. 33, L. '12; 4071, R. S. '13, rev.)

§ 2291. Fire protection of one exit mines. All mines having but one exit covered with a building containing the mechanical plant, furnace room or blacksmith shop, shall have fire protection, water if possible, and if water is not available, chemical fire extinguishers or hand grenades in convenient places for immediate use. (§ 20, Ch. 33, L. '12; 4072, R. S. '13, rev.)

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§ 2292. Escapement shafts. Every person having in a mine a vertical or incline shaft to a greater depth than one hundred feet, and who has drifted a distance of two hundred feet or more, and commenced to stope, shall provide and maintain to the hoisting shaft or the opening through which men are let into or out of the mine and the ore is extracted, a separate escapement shaft, raise, or opening, or an under ground opening or communication with some other contiguous mine; if such contiguous mine belongs to a different person, the right to use the outlet through such contiguous mine, in all cases when necessary, or in case of accident, must be secured and kept in force. Where such an escapement shaft or opening shall not be in existence at the time that stoping is commenced, work upon such an escapement shaft, or opening, must be commenced as soon as stoping begins and be diligently prosecuted until completed, and said escapement shaft, raise, or opening shall be continued to and connected with the lowest workings in the mine. The escapement shaft or exit, must be of sufficient size to afford an easy passageway, and if it be a raise, or shaft, must be provided with substantial ladders from the deepest workings to the suface.

Whenever the exit or outlet is not in a direct or continuous course, signboards plainly marked showing the direction to be taken must be placed at each departure from the continuous course. (§ 21, Ch. 33, L. '12; 4073, R. S. '13, rev.)

§ 2293. Hoists; equipment and operation. No person addicted to the use of intoxicating liquors or drugs, or under eighteen years of age, shall be employed as a hoisting engineer. All power hoisting machinery used in hoisting from or lowering employees and materials into mines, except prospect shafts not exceeding three hundred feet in depth, shall be equipped with an indicator, placed near and in clear view or hearing of the engineer. This indicator must be in addition to marks on the rope, or cable or drum. It shall be unlawful to hoist men out of, or lower men into, a mine at a speed greater than fifteen hundred feet per minute; provided, however, the state mine inspector or his deputies may designate a lesser speed than fifteen hundred feet per minute, in any shaft, if in his discretion this speed may be unsafe.

All hoisting machinery shall be inspected once in every twenty-four hours by a competent person appointed by the mine operator for that purpose, and every such inspector shall immediately report in writing to said operator any and all defects found. All ropes or cables used for hoisting purposes shall be of approved quality and manufacture; and in shafts and winzes of over two hundred feet in depth wire ropes or cables only shall be used for hoisting purposes. All head frames where men are hoisted at a speed of over two hundred and fifty feet per minute and where more than twenty-five men are employed, shall be so constructed as to allow at least twenty-five feet above the hoist landing stage, in which the cage, skip, or bucket can travel freely in case of an overwind.

It shall be unlawful for the operator of any mine to permit the hoisting or lowering of men in any shaft deeper than three hundred feet, excepting shafts in process of sinking, unless an iron-bonneted safety cage equipped with gates at least five feet in height, be used for the hoisting and lowering of such men. Every cage shall have over-head bars of such arrangement as to give every man on the cage an easy and secure handhold, and every cage or skip used for hoisting men shall be provided with a safety catch of sufficient strength to hold the cage or skip with its maximum load at any point in the shaft in the event that the hoisting cable should break. The inspector shall see that all cages and skips are equipped as herein required, and that on all cages the safety catches are kept well oiled and in good working condition. In any shaft of less than three hundred feet deep, where no safety cage is used, and where cross-heads are used, platforms for employees to ride upon, equipped with safety catches as required herein for cages and skips, shall be provided.

All vertical shafts more than two hundred feet deep from which hoisting is done by means of a bucket, must be provided with suitable guides, and in connection with the bucket there must be a cross-head traveling upon the guides. The height of the cross-head shall be at least one and one-half times its width. If the cross-head be a type that is not secured to the hoisting rope, a stopper of design to be approved by the mine inspector must be securely and rigidly fastened to the hoisting-rope at a suitable point above the rim of the bucket. The number of persons permitted to ride on the deck of a cage, or in or on a skip or bucket, shall be determined by the mine inspector, and no more than that number shall be allowed to ride. No person shall ride upon a cage, nor in nor on a skip, or bucket, when the same is loaded with rock or ore, nor when loaded with tools, timber, powder, or other material, except for the purpose of assisting in passing these through the shaft.

When tools, timber, or other materials are to be loaded or hoisted in the shaft, the ends, if projecting above the top of the bucket, skip, or other vehicle, shall be securely fastened to the hoisting rope or to the upper part of the vehicle, and tools, timber, or other material loaded erectly upon a cage must be securely lashed before being hoisted or carried. No cage, skip, bucket, or other vehicle, shall be lowered directly to the bottom of the shaft, fifty feet or more in depth, where men are working, but must be stopped at least fifteen feet above the bottom until the signal to lower further has been given by one of the men at the bottom of the shaft.

Persons engaged in deepening a shaft in which regular hoisting from an upper level is going on shall be protected from the danger of falling material by a suitable covering, sufficient opening in such covering being left only for the passage of the bucket or conveyance used in the sinking operations. In shafts, winzes or raises, where two or more crews of men are working, one crew above another, there shall be a bulkhead between each two crews of men, strong enough to stop any tools or other material that may fall from the men

working above, and only the cage, skip, or bucket compartments shall be left open. All shafts or winzes shall have a bulkhead over the men working in the bottom of the shaft or winze, built of timber not less than six inches in thickness, not more than fifty feet above the bottom of said shaft or winze, providing ample protection for the men working in the bottom of said shaft or winze, and so constructed as not to shut off the air circulation; the cage, skip, or bucket compartment only to be left open. All shafts or winzes shall be cleaned down below the bulkhead after each blasting. Windlasses and winzes in mines shall be provided with a suitable plug or some other reliable device to prevent running back of the bucket or other conveyance. No open hook shall be used with a bucket in hoisting, but only some approved form of safety hook or shackle hook.

A release signal of one bell to the hoisting engineer shall be given to release the cage, skip, or bucket after it has been stopped at any station. At any mine where men are hoisted by mechanical means, a hoistman charged with the hoisting thereof shall be kept on duty at the hoist at all times when men are underground. (Ch. 27, L. '31.)

§ 2294. Outlets; shafts; winzes and ladderways. Every mine shall have at least two outlets to the surface, except as hereinbefore provided. Such outlets must not lead to the surface in one and the same house, and must not at any point be nearer to one another than thirty feet. In the event that two outlets of any mine, or part of them, do not belong to the same mine, the owners and operators of the respective mines shall be responsible for the outlet, or part of it, in their respective mines, being kept in proper repair; and should any obstruction arise in any such outlet, or anything occur in one of the mines to jeopardize the safety of the outlet, the occurrence shall be immediately reported to the owner or person in charge of the other mine. If either of the two outlets or part of them, be situated in an abandoned mine the operators of the working mine shall be jointly and severally responsible for the proper maintenance and repair of such outlet.

At every mine where a single shaft be allowed to afford the only means of ingress and egress to the persons employed under ground, such shaft, if more than two hundred feet deep, shall be divided into at least two compartments, and one of the compartments shall be set aside for a ladder-way, which must be equipped as hereinafter provided. Whenever such a single shaft be covered by a building not absolutely fireproof, the ladder-way shall be securely bulkheaded at a point at least twenty-five feet below the collar of the shaft, and below this bulkhead, if the shaft is situated upon a side hill, a drift shall be driven to the surface; if the shaft be situated in a level country, this drift shall be driven to a safe distance beyond the walls of the building, but in no case less than thirty feet, and from there a raise shall be made to the surface. This raise shall be equipped with a ladder-way, and it, together with the drift connecting with the main shaft, shall be kept in good repair and shall afford a safe escape in the event of fire.

No structure shall be erected over an outlet of a mine, except the head-frame necessary for hoisting from a shaft and the hatch or door necessary for hoisting from a shaft and the hatch or door required to protect, from inclemency of the weather, men obliged to work at the top of a shaft. If for the latter purpose a house be required, the mine inspector may, in writing, grant permission for its construction, but such a house must be as small as possible, constructed of uninflamable material, and the storage of any inflammable material inside of it, or within thirty feet of it, is prohibited.

Every adit of which the mouth is covered by a house or building of any kind shall be provided with a fireproof door, near the mouth of the adit, that can be closed from the outside of the building by means of a pull wire or cable, so as to keep the gases of combustion from entering the mine in the event that fire destroys the building at the mouth of the adit.

Every shaft, winze, raise, or incline, of steeper slope than forty degrees from the horizontal and deeper than forty feet, through which men are obliged to travel, shall be provided with a ladder-way. Suitable ladders, or footways, shall be provided to connect floors of sets in stopes, and other places requiring communication in a mine. Every shaft shall have, in addition to any mechanical means of ingress and egress, at least one ladder or footway communicating from the lowest workings of the mine to the surface.

Permanent ladder-ways shall be strong and shall be firmly fastened and kept in good repair. In a vertical shaft the mine inspector may, in his discretion, by an order in writing, direct that the ladder shall be inclined at the most convenient angle which the space where the ladder is fixed allows, and every such ladder shall have substantial platforms at intervals of not more than twenty feet. The platform shall be closely covered, with the excep-

tion of an opening large enough to permit the passage of a man and shall be so arranged that a person cannot fall from one ladder through the opening to the next ladder. Ladder-ways shall be provided in shafts in the course of sinking to within such distance from the bottom as will secure them from damage by blasting, from the end of such ladder-ways, portable ladders shall be extended to the bottom of the shaft.

All stations or levels shall have a passage-way around the working shaft so that crossing over the hoisting compartments may be avoided. All sumps shall be securely planked over. At shaft stations a gate or a guard rail must be provided and kept in place across the shaft, except when cage, skip, or bucket is being loaded, but may be temporarily removed for repairs or other operations, if proper precaution to prevent danger to persons is taken. The top of the shaft shall be protected by a substantial gate, guard rail, or chain.

Winzes or raises shall not be started in the direct line of a drift, but shall be offset from the drift, and if opening from below directly on any drift or tunnel, traveled by men, shall be covered with a grizzly or by doors. The opening of offset winzes shall be protected by a fence or guard rail not less than three feet or more than four feet in height above the level of the drift. Winzes, sumps, and all other openings in the floor of a drift or stope must be kept covered by a substantial hatch, or planking, or provided with guard rails. (§ 23, Ch. 33, L. '12; 4075, R. S. '13, rev.)

§ 2295. Ventilation. Pure air shall be made to circulate through and into the shafts, winzes, levels, and other working places of every mine, in such quantity as will maintain them in a fit state for working and passing therein. In dry places where the operation of a power drill will produce dust, all power drills used therein shall be equipped with a spraying device, and an adequate spraying system shall be installed and used to settle all dust or gasses created. The total quantity of carbon dioxide present in the air shall not exceed twenty-five one-hundreds per cent by volume, except where firing of explosives has been done a higher percentage is permissable for a reasonable length of time after the last explosion, and the operator shall provide respirators whenever needed. Waste timber in under-ground workings shall not be piled up and permitted to decay, but shall be removed as soon as practicable. (§ 24, Ch. 33, L. '12; 4076, R. S. '13, rev.)

§ 2296. Lights; trolley wires. Stationary lights, deemed sufficient by the mine inspector, shall be provided during working hours at all stations in shafts during the time while in actual use; and at stations in levels where hoisting or hauling is effected by means of machinery; and at night at all working places on the surface. No candles shall be left burning in a mine when the person using the candle departs from his work for the day. Electric trolley wires shall be at least seven feet above the floor. (§ § 25, 35, Ch. 33, L. '12; 4077, 4087, R. S. '13, cons. & rev.)

§ 2297. Precautions against flooding. When advancing a drift, adit, level, or incline toward a mine working that is thought to be filled with water, a bore hole must be kept at least twenty feet in advance of the breast of the drive; and also if necessary in directions laterally from the course of the drive. Such a working place must not exceed six feet in width and such further measures shall be taken as may be deemed necessary by the mine inspector to obviate the danger of a sudden breaking through of water. No raise shall be allowed to approach within ten feet of any portion of a winze, or a stope, in which there is a dangerous accumulation of water, unless such winze or stope be first unwatered by bailing or pumping, or by means of a bore from the raise. Where in the opinion of the mine inspector, there is a danger of a sudden inrush of water, such additional raises, drifts, or other workings shall be constructed as are necessary to insure the escape of workmen from the lower workings. Places for the storage of water in mines, shall be so constructed as to prevent leakage, as far as possible, and insure the safety of the men working below the same.

It shall be unlawful for any operator to impound water or to keep water impounded within any mine in which men are working below the water so impounded, in such manner as to endanger the safety of such men, unless said water be impounded by a dam, or wall approved by the mine inspector. (§ 26, Ch. 33, L. '12; 4078, R. S. '13, rev.)

§ 2298. Interfering with equipment forbidden. No person shall knowingly injure or destroy any equipment or machinery of a mine; nor, unless authorized so to do, obstruct or open an airway, handle or disturb any part of the machinery of the hoisting engine of the mine, open the door of a mine and neglect to close it, endanger the mine or those working therein, disobey a lawful order, or do a wilful act whereby the lives or health of persons working in such mines, or the security of a mine, or the machinery connected therewith,

may be endangered. (§ 31, Ch. 33, L. '12; 4083, R. S. '13, rev.)

§ 2299. Danger signals; visitors. Notices shall be placed at the entrance to any working place deemed dangerous, and at the entrance to old or abandoned workings; and no person other than those authorized by the operator, manager, or superintendent, shall remove or go beyond any caution-board or danger signal so placed. Visitors shall not be allowed underground unless accompanied by the owner or his agent for that purpose. (§ 32, Ch. 33, L. '12; 4084, R. S. '13, rev.)

§ 2300. Fire equipment and training of fire crew. At any mine employing twenty-five or more men underground, the operator shall provide, and keep in a readily accessible place, at least two fire fighting helmets in condition to be used in case of emergency, and provide training for a crew in the use of said helmets; tests of the helmets by the actual use thereof by such crew shall be made at least monthly. (§ 33, Ch. 33, L. '12; 4085, R. S. '13, rev.)

§ 2301. Signalling apparatus. Every shaft and each compartment thereof used for hoisting, if exceeding fifty feet in depth, and not exempted in writing by the mine inspector, shall be provided with an efficient means of interchanging distinct and definite signals between the top of the shaft and the lowest level from which hoisting is being done, and the various intermediate levels for the time being in use. The signalling appartus shall be either wire or cable actuating a bell, or whistle, or a speaking tube, or a telephone, or an electric system, or two or more of these. In mines where a station tender is employed no person shall ring any signal bell except the station tender, except in case of danger, or when the main shaft is being sunk. (§ 34, Ch. 33, L. '12; 4086, R. S. '13, rev.)

§ 2302. Signal Code. The following signal code shall be used in all mines: 1 bell, stop immediately if in motion; 1 bell, hoist muck; 1 bell, release cage, skip, or bucket; 2 bells, lower; 3-1 bells, hoist men; 3-2 bells, lower men, if bells rung slowly move slowly; 4 bells, steam on or off; 5 bells, blasting or ready to shoot. This is a caution signal and if the engineer is prepared to accept it he must acknowledge by raising bucket or cage a few feet then lowering it again. After accepting this signal engineer must be prepared to hoist men away from blast as soon as signal "1 bell" is given and must accept no other signal in the meantime. 6 bells, air on or off; 7 bells, danger signal, followed by station signal calls cage to that station. This signal takes precedence over all others except an accepted blasting signal.

STATION SIGNALS

1-2 bells, collar of shaft
1-3 bells, 1st level
1-4 bells, 2nd level
1-5 bells, 3 level
2-1 bells, 4th level
2-2 bells, 5th level
2-3 bells, 6th level
2-4 bells, 7th level
2-5 bells, 8th level
4-1 bells, 9th level
4-2 bells, 10th level
4-3 bells, 11th level
4-4 bells, 12th level
4-5 bells, 13th level
5-1 bells, 14th level
5-2 bells, 15th level
5-3 bells, 16th level
5-4 bells, 17th level
5-5 bells, 18th level
6-1 bells, 19th level
2—1-2 bells, 20th level
2—1-3 bells, 21st level
2—1-4 bells, 22nd level
2—1-5 bells, 23rd level
2—2-1 bells, 24th level
2—2-2 bells, 25th level
2—2-3 bells, 26th level
2—2-4 bells, 27th level
2—2-5 bells, 28th level
2—4-1 bells, 29th level
2—4-2 bells, 30th level
2—4-3 bells, 31st level
2—4-4 bells, 32nd level
2—4-5 bells, 33rd level
2—5-1 bells, 34th level
2—5-2 bells, 35th level
2—5-3 bells, 36th level
2—5-4 bells, 37th level
2—5-5 bells, 38th level
2—6-1 bells, 39th level

Station signal must be given before hoisting or lowering signal. The engineer shall not move a cage, skip, or bucket unless he understands the signal. One copy of this signal code shall be posted on the gallows frame, one at each station and one before the engineer. Special signals may be used provided they are easily distinguished by their sound, or otherwise, from the foregoing code, and do not interfere with it in any way. (Ch. 27, L. '31.)

§ 2303. Copy of law to be kept posted. The operator or person in charge of every mine within the provisions of this article shall keep at all times in the office of said mine and in the timekeeper's office thereof, in an accessi-

ble place and subject to inspection by all workmen and persons interested in the same, at least one printed copy of this article. (§ 38, Ch. 33, L. 12; 4090, R. S. '13, rev.)

§ 2304. Violations; penalty. Any person violating a provision of this article where no other penalty is expressly provided, shall be guilty of a misdemeanor. (§ 39, Ch. 33, L. '12; 4091, R. S. '13, rev.)

§ 2305. Common system of drainage; contribution of cost. Whenever adjacent or contiguous mines, opened, developed and worked upon the same or upon separate lodes have a common ingress of water; or, by reason of subterranean communication of water have a common drainage, the operators of said mines shall provide for their proportionate share of such drainage, or to prevent the water in such mine from flowing in or upon neighboring mines. If an operator of any such mines shall fail or neglect to provide for the drainage thereof, and by reason of such failure or neglect, the operator of an adjacent or contiguous mine is compelled to pump or drain or otherwise provide for the water flowing in from such first mentioned mine, the operator of the mine so in default, shall be liable for his proportion of the actual and necessary cost and expense of pumping, draining or otherwise providing for said water. (§ § 3252-3, R. S. '01; 4047-8, R. S. '13, cons. & rev.)

§ 2306. Order for inspection. When an action is commenced to recover the costs and expenses for draining a lode or mine, the court shall grant an order allowing the plaintiff to inspect the lodes or mines claimed to have been drained, upon application and affidavit that such inspection is necessary for a proper preparation of the case for trial. Such order shall designate the number of persons, not exceeding three, besides the plaintiff, to make the examination and they may cause the removal of any rock, debris, or any other obstacle in any lode or vein when such removal is shown to be necessary to a just determination. (§ 3256, R. S. '01; 4051, R. S. '13, rev.)

§2307. Terms defined; extent of application. This article shall apply to all mines in the state, and as herein used the term "mine" shall include all parts of a mine and any mining plant or equipment connected therewith, underground or on the surface, which contributes, or may contribute, to the mining or handling of ore, coal, or other metalliferous or non-metalliferous mineral product; the term "operator" shall mean the person, association or corporation in immediate possession of a mine, or mining claim, or accessories thereof, as owner or lessee thereof, and as such, responsible for the management and condition thereof; the term "inspector" signifies the state mine inspector and his deputies; the words "excavations" and "workings," signify any or all parts of a mine excavated, or being excavated, including shafts, tunnels, entries, winzes, raises, stopes, open cuts, and all working places, whether abandoned or in use. (§ 1, Ch. 33, L. '12; 4053, R. S. '13, rev.)

CHAPTER 24.

Employer and employee.

§ 1354. Hours for hoisting engineers and furnace men; penalty. The period of employment of hoisting engineers at the mines in the state, and furnace men at the smelters in the state, shall be eight hours per day except in cases of emergency where life or property is in imminent danger. Any person, including the employee, who violates the provisions of this section shall be guilty of a misdemeanor and be punished by a fine of not less than one hundred dollars, nor more than three hundred dollars for each offense. (§ § 1-2, Ch. 26, L. '12; 3108-9, R. S. '13, cons. & rev.)

§ 1355. Mining and smelting work, electric plants, declared hazardous. The employment in all underground mines, underground workings, open cut workings, open pit workings, in or about, and in connection with, the operation of smelters, reduction works, stamp mills, concentrating mills, chlorination processes, cyanide processes, cement works, rolling mills, rod mills, coke ovens, blast furnaces, and electric light or electric power plants, is hereby declared to be injurious to health and dangerous to life and limb of those employed therein. (§ 1, Ch. 28, L. '12; 3147, R. S. '13; 1, Ch. 50, L. '12; 3098, R. S. '13, cons. & rev.)

§ 1356. Hours of labor per day for miners; persons liable; penalty. The period of employment for all persons employed, occupied or engaged, in work or labor, of any kind, in underground mines or underground workings of any kind; open cut workings or open pit

workings; in or about, or in connection with, the operation of smelters, reduction works, stamp mills, concentrating mills, chlorinating processes, cyanide processes, cement works, rolling mills, rod mills, and at coke ovens and blast furnaces, shall not exceed eight hours within any twenty-four hours, and the said eight hours shall include the time employed, occupied or consumed, in descending to and ascending from the point or place of work in any underground mine or underground workings, or the time employed, occupied or consumed in leaving the surface of any tunnel, open cut, or open pit workings, for the point or place of work therein, and in returning thereto from said point or place of work; except that in an emergency, where life or property is in imminent danger, the period may be prolonged during the continuance of such emergency, and except that the hours of employment may be changed from one part of the day to another at stated periods, such change not to occur more than once in any two weeks, and the employment may be for more than eight hours during the day in which such change is made. Any person violating any provision of this section, and any person, who, as foreman, manager, superintendent, director, or officer of a corporation, or as employer or superior officer of any person, commands, persuades, or allows any person to violate any provision of this section shall be guilty of a misdemeanor, and be punished by a fine or not less than two hundred and fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail for not less than three months nor more than six months. In a trial for a violation of this section, the jury, if a jury trial, shall decide whether the punishment shall be a fine or imprisonment, or both fine and imprisonment. Each day's violation shall be a separate offense. (Ch. 26, L. '12, S. S.; § 713, P. C. '13, rev.)

§ 1359. Lavatories, change rooms, bath, in mines and certain works; penalty; pornography. For the maintenance of public health, proper bath rooms, wash rooms, water closets and a heated change room immediately contiguous to the works, shall be provided by every person whether owner or operator engaged in the treatment or reduction of ores or metals, in cement works, in works using oils, cyanide, acids or quicksilver. Such water closets shall be screened and ventilated, with not less than one seat for each twenty-five persons, and one seat for each fraction thereof above ten, employed in such establishment. One shower bath shall be provided for every twenty-five men employed in such establishment with adequate wash room facilities. These rooms and places shall at all times be open to employees and shall be kept in a clean and sanitary condition. A heated wash and change room shall be maintained contiguous to every mine employing twenty-five or more men.

Any person violating this section, and any person placing any obscene picture, writing or marking in or about the premises herein mentioned, shall be guilty of a misdemeanor, and punished by a fine of not less than fifty dollars, nor more than three hundred dollars, or by imprisonment in the county jail for not less than ten days nor more than sixty days, or by both such fine and imprisonment. (§ § 1-2-3-4, Ch. 165, L. '19, cons. & rev.)

Stockton, Calif.
PAT JAN. 21, 1908